

SUMMARY

CONSTRUCTION

LIFT/ACCESS

AGRICULTURE

COMMERCIAL TRUCK

MARKET DATA: FEBRUARY 2020

EquipmentWatch remains the largest sales database on the planet with 20x the sales data of any other source.

\$31,256,435,773

RESALE

\$30,918,372,021

405,617 Assets

AUCTION

\$338,063,752

12,619 Assets

The *EquipmentWatch* **Market Report**™ is a monthly resource for the construction, lift/access, agriculture and commercial truck industries to make better-informed decisions by leveraging key **equipment values, market activity, age and usage metrics**.

How is the Price Stability INDEX calculated?

For more detailed articles, visit EquipmentWatch Intelligence online. **MARKET SUMMARY** MONTH OVER MONTH YEAR OVER YEAR MARKET ACTIVITY PRICE STABILITY INDEX TO **MARKET METRICS MARKET METRICS V** 0.6% **7** 21.3% **T** 1.0% **7** 3.4% 98.95 CONSTRUCTION **VALUES VALUES** 95 105 **FMV** FLV FMV FLV \$17,466,670,799 169,673 **V** 12.1% **7** 2.3% VOLUME **5.0% VOLUME 471.8%** MARKET VALUE ASSETS DEFLATED STABLE RESALE AUCTION INFLATED **AUCTION** RESALE 99.10 LIFT/ACCESS ▼ 8.0% **T** 17.2% **V** 0.8% **7** 2.2% VALUES. **VALUES** 95 FMV FIV FMV FI V 105 \$1,534,695,054 45,647 17.8% **20.2% ▲ 18.1% ▲** 375.2% MARKET VALUE ASSETS **VOLUME VOLUME** DEFLATED STABLE INFLATED RESALE **AUCTION** RESALE **AUCTION V** 0.5% **V** 26.4% **V** 0.4% **V** 4.4% 99.44 **AGRICULTURE** VALUES. VALUES. FMV FLV FLV FMV 95 105 \$6,483,765,569 73.536 **V** 18.0% **26.7% V** 8.6% **200.9%** MARKET VALUE **ASSETS** VOLUME VOLUME DEFLATED STABLE INFLATED RESALE **AUCTION** RESALE **AUCTION T** 15.2% **16.1% VALUES 7** 2.8% **4.8%** COMMERCIAL TRUCK 97.35 **VALUES FMV** FLV FMV FLV 95 105 \$5,771,304,351 129,380 36.0% **282.1%** VOLUME 1.0% **▲ 1669.2%** ASSETS MARKET VALUE VOLUME DEFLATED STABLE RESALE **AUCTION** INFLATED RESALE **AUCTION**

DEFLATED



INFLATED

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MARKET METRICS

V 1.0%

7 2.3%

RESALE

FMV

COMMERCIAL TRUCK

CONSTRUCTION

MARKET ACTIVITY

\$17,466,670,799

MARKET VALUE

OVERALL

VALUES

TYPE TRENDS

7 21.3%

FLV

5.0%

AUCTION

YEAR OVER YEAR

MARKET METRICS

RESALE

V 0.6%

VOLUME **▼ 12.1%**

FMV

BRAND TRENDS

VALUES

VOLUME

REGIONAL TRENDS

7 3.4%

FLV

471.8%

AUCTION



STABLE

How is the Price Stability INDEX calculated?

MARKET PERFORMANCE

In the month of February, average FMV and FLV saw declines compared to January. FLV market activity saw an expected large increase, but FMV market activity saw a 2.3% month-over-month decrease.

169.673

ASSETS

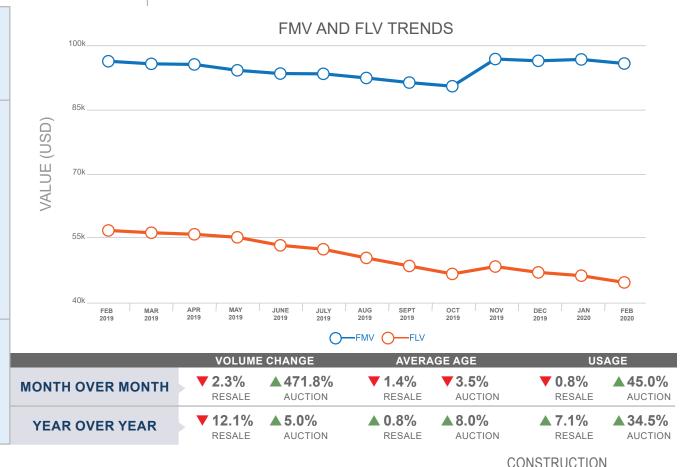
MARKET HIGHLIGHTS

- Many auctions take place in February every year, and compared to February 2019, February 2020 saw a 5% increase in FLV market activity, but a 21.3% decrease in average FLV.
- Year-over-year average age and utilization on the auction channel saw large increases: Average age increased by 8% and average utilization increased by 34.5% compared to February 2019.
- Although year-over-year average FMV has only seen small changes, FMV market activity in February 2020 noticeably decreased year-over-year, dropping by 12 1%

MARKET FORECAST

Auctions will continue into March, so expect to see a similar level of market activity next month, while also possibly seeing small decreases in average FMV.

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How is the Price Stability INDEX calculated?

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OVERALL

TYPE TRENDS

BRAND TRENDS

REGIONAL TRENDS



MARKET PERFORMANCE

Average FMV declined by about 0.8%, while average FLV dropped by over 2% from January to February. When compared to February 2019, average FMV is down 8% and average FLV is down by over 17%.

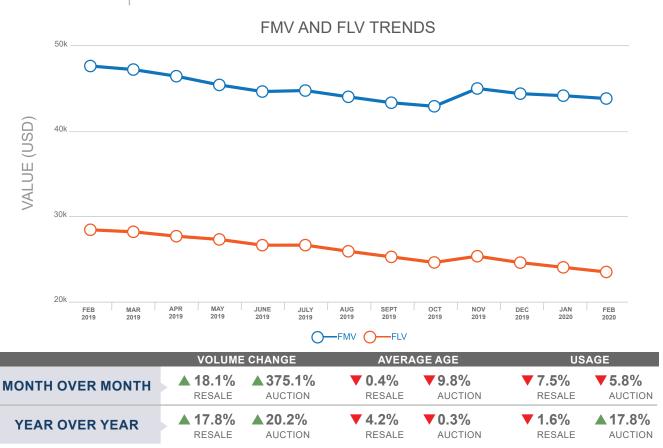
MARKET HIGHLIGHTS

- The overall number of assets increased by about 4.3% from January to February, but the overall market value declined by almost 4%. This usually occurs in heavy auction months when older, cheaper equipment floods the market
- Month-over-month average age and utilization fell across both channels, while year-over-year utilization on the auction channels is up almost 18%.
- FMV market activity increased by a higher-thanexpected percentage from January to February, while FLV market activity had its expected increase at about 375%

MARKET FORECAST

We could see FLV market activity remain at these higher levels in March, while average FLVs should stay relatively low, as they were in February.

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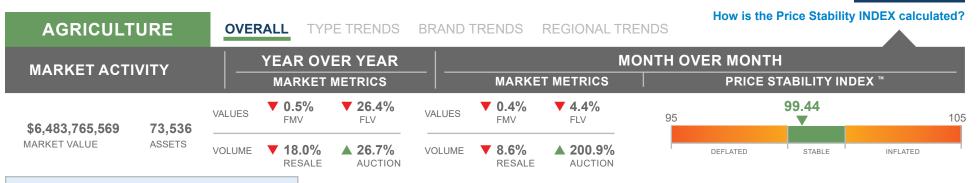
SUMMARY

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MARKET PERFORMANCE

Average FMV is down minimal percentage points monthover-month and year-over-year, while average FLV dropped at a much larger amount year-over-year. FMV market activity was down month-over-month and yearover-year, while FLV market activity showed opposite trends, going up over both time periods.

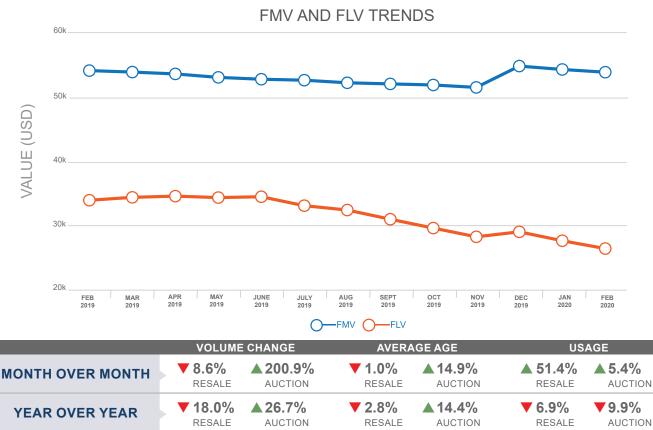
MARKET HIGHLIGHTS

- Average age on the resale channel dropped 2.8% yearover-year and increased 14.4% on the auction channel, widening the gap between the two channels compared to month-over-month metrics.
- Year-over-year and month-over-month FMV market activity has declined sharply, while FLV market activity remains strong over both time periods.
- Average FMV remains relatively unchanged year-overyear, while average FLV continues to decrease even after steady increases in market activity.

MARKET FORECAST

The agricultural market could continue to see a decline in average values and increase in overall market activity given the time of year. Once the working season picks up, expect average values to increase.

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MARKET ACTIVITY

OVERALL

VALUES

TYPE TRENDS

YEAR OVER YEAR

MARKET METRICS

BRAND TRENDS

REGIONAL TRENDS



How is the Price Stability INDEX calculated?

\$5,771,304,351 MARKET VALUE

129,380 **ASSETS**

T 15.2% FMV **36.0%** VOLUME

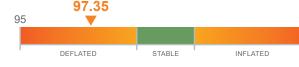
282.1% RESALE AUCTION

16.1%

FLV

7 2.8% **4.8%** VALUES FMV FLV **1.0% ▲** 1669.2% VOLUME RESALE **AUCTION**

MARKET METRICS



MARKET PERFORMANCE

The average FLV increased 4.8% in February with the increase in FLV market activity over the month, which impacted the average FMV. The average FMV dropped 2.8% which was a -15.2% decrease from the average FMV in February 2019.

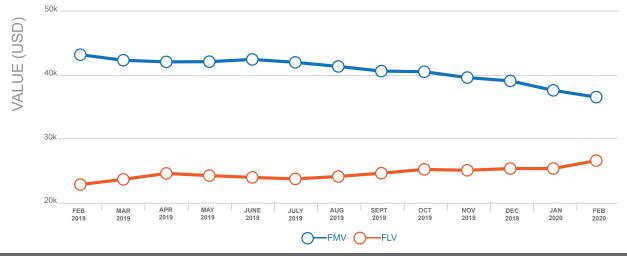
MARKET HIGHLIGHTS

- · As expected, FLV market activity increased over 16-fold during February in comparison to January.
- The average age dropped significantly (-25.3%) between January and February on the auction channel given the much higher FLV market activity.
- · With the drop in average age on the auction channel last month, it is not surprising that the average utilization for the channel also dropped by 21.6%.

MARKET FORECAST

Expect average FMV to drop in the next month due to the impact of February auction channel sales.

FMV AND FLV TRENDS



	VOLUME CHANGE		AVERAGE AGE		USAGE	
MONTH OVER MONTH	▲ 1.0% RESALE	▲ 1669.2% AUCTION	▼1.3% RESALE	▼25.3% AUCTION	▲ 0.3% RESALE	▼21.6% AUCTION
YEAR OVER YEAR	▲ 36.0% RESALE	▲ 282.1% AUCTION	▲ 3.9% RESALE	▲4.9% AUCTION	▼3.8% RESALE	▼17.2% AUCTION



INTRODUCTION

The EquipmentWatch Market Report is a compilation of a wide array of EquipmentWatch's data, designed to bring you an in-depth look at used equipment markets over the last month.

This Appendix is designed to answer your questions regarding this report. Here we define and illustrate how we think about values, market activity, age, Usage, and regional influence for the most common types of equipment seen on used markets across North America.

OUR DATA

Selection Criteria for OEMs and Subtypes

EquipmentWatch tracks Resale and Auction prices and activity for over 15,000 models across 389 manufacturers throughout North America. With over \$800 billion in collected equipment transactions, EquipmentWatch is your primary source for intelligence regarding used equipment markets.

The data in this report is divided into four distinct equipment markets: Construction, Lift/Access, Agriculture, and Commercial Trucks. For each market, we selected the top equipment types based on their market share from January 2019 to December 2019. They're listed in the table to the right.

Construction	Lift/Access	Agriculture	Commercial Trucks	
4-Wd Articulated Wheel Loaders	Electric Self Propelled Scissor Lifts	Track Tractors	Heavy Duty: Conventional - Sleeper (Heavy Tractor)	
Articulated Frame Graders	I.C. Pneumatic Tire Lift Trucks	Balers	Heavy Duty: Conventional - Day Cab (Heavy Tractor)	
Articulated Rear Dumps	I.C. Self Propelled Telescopic Boom Aerial Lifts	Combines	Heavy Duty: Conventional - Day Cab (Heavy Cab Chassis)	
Compact Track Loaders	I.C. Self-Propelled Articulating Boom Aerial Lifts	Corn Headers	Medium Duty: Conventional - Day Cab (Cab Chassis)	
Crawler Mounted Compact Excavators	Telescoping Boom Rough Terrain Lift Trucks	Wheel Tractors	Medium Duty: Cabover - Day Cab (Cab Chassis)	
Crawler Mounted Hydraulic Excavators	I.C. Cushion Tire Lift Trucks	Planters	Medium Duty: Crew (Cab Chassis)	
Large Generator Sets				
Single Drum Vibratory Compactors				
Skid Steer Loaders				
Standard Crawler Dozers				
Tandem Vibratory Compactors				
Tractor-Loader- Backhoes				



We have also limited the scope of the EquipmentWatch Market Report to the following brands in each market:

Construction	Lift/Access	Agriculture	Commercial Truck	
Bobcat	Caterpillar	Deere	International	
Case	Genie	Case IH	Freightliner	
Caterpillar	JLG	New Holland	Volvo	
Deere	Sky Trak	Massey Ferguson	Kenworth	
Komatsu	Skyjack	Challenger	Peterbilt	
Volvo	Hyster	Kubota	Hino	

THE EQUIPMENTWATCH PRICE STABILITY INDEX™

Academic justification

The EquipmentWatch Price Stability Index[™] is a new metric for understanding used equipment markets for used heavy equipment. It measures resale price capacity based on the movement of market prices and market activity among the equipment types and manufacturers presented above.

Methodology and Calculation

The EquipmentWatch Price Stability Index™ is based on the Laspeyres Index, one of the many economic indices used to monitor changes in prices over time. To calculate it, we use the framework provided by the Laspeyres Index:

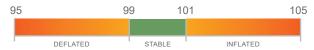
$$P_{L} = \frac{\sum (p_{c,t_{n}}) * (q_{c,t_{0}})}{\sum (p_{c,t_{0}}) * (q_{c,t_{0}})}$$

This equation sums the product of prices in the current month and quantity of the previous month and divides that by the product of prices in the previous month and quantity in the previous month.

We have modified this method to track the change in prices for each equipment type from month-to-month against the change in market activity for each equipment type month to month.

Interpretation

The EquipmentWatch Price Stability Index™ can be thought of as an index of price capacity. In more formal terms, it measures how efficiently used markets adjust to equilibrium given previous adjustments in prices and market activity. There are three primary ranges in the EquipmentWatch Price Stability Index[™], as noted below:



When the EquipmentWatch Price Stability Index™ is higher than 101, that indicates that equipment is valued at a higher level than expected, given last month's prices and amount of market activity. We categorize this range as "Inflated".

When the EquipmentWatch Price Stability Index[™] is lower than 99, it indicates that equipment is valued at a lower level than expected, given last month's prices and market activity. We categorize this range as "Deflated".

When the EquipmentWatch Price Stability Index™ is between 99 and 101, it is typically demonstrating that equipment prices and market activity are moving appropriately towards market equilibrium. We categorize this range as "Stable".

It is important to note that a higher rating on EquipmentWatch Price Stability Index™ does not necessarily imply that used markets are better than a lower rating. For some, price inflation is desirable; for others, it is undesirable. However, all parties involved in buying or selling equipment on used markets can use the EquipmentWatch Price Stability Index™ to easily understand how prices in a particular region or equipment channel are moving relative to the previous month.



SECTION GUIDES

The Introduction

In the top left, we exhibit a tally of the estimated market value of market activity last month in the Resale channel and Auction channel.

In the main table, we display market activity and assets for each market, along with month over month and year over year changes in Fair Market Value and Forced Liquidation Value.

Overall Trends

This page is an overview of each channel. The graph highlights an overall FMV and FLV trend line for all of the equipment types and manufacturers in the report for the last 13 months. It also displays very general month over month and year over year trends across the entire channel.

Type Trends

This page subsets the analysis of the previous page across each of the key equipment types in this report.

Brand Trends

This page shows some of the key month over month trends for the manufacturers represented in this report, including equipment values, Usage, market activity, and age trends.

Regional Trends

This page shows the EquipmentWatch Price Stability Index[™] for each of the 14 regions, using the same calculation method as the EquipmentWatch Price Stability Index[™] shown on the first page of the report. The states and provinces which make up each region are listed in the table to the right.

Note that due to regional disparity in market activity, some regions with very little or no market activity in the last month are excluded from the analysis. These are marked with "NA" on the map.

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Country	Region	State/Province
USA	А	CT, DE, MA, ME, NH, NJ, MY, RI, VT
USA	В	MD, P, VA, WV
USA	С	AL, FL, GA, KY, MS, NC, SC, TN
USA	D	IL, IN, MI, OH, WI
USA	Е	IA, KS, MO, NE
USA	F	AR, LA, OK, TX
USA	G	AZ, CO, NM, UT
USA	Н	ID, MN, MT, ND, SD, WY
USA	I	CA, NV, OR, WA
USA	J	HI
USA	K	AK
CAN	L	NT, NU, YT
CAN	M	AB, BC, MB, SK
CAN	N	NB, NL, NS, ON, PE, QC

FAQS

Why did you limit the equipment types in this report?

EquipmentWatch tracks market activity for over a hundred unique equipment types each month. For each channel, we selected the most popular equipment types, based on the frequency of appearance on the resale and auction channels.

Why are there only 24 manufacturers in this report?

EquipmentWatch tracks market activity for almost 400 unique manufacturers each month. For each market, we selected the top 6 manufacturers. As the markets shift and prominence on used markets changes, we will adjust our selections accordingly.



Why don't you use OLV?

Orderly Liquidation Value, or OLV, is a third major category of values. These are the values of an asset given a single seller and multiple potential buyers given a long or indefinite timeframe in which to dispose. Given the lack of clarity around the time dimension, we have chosen not to make assumptions about the orderly liquidation process. However, OLV is typically between FLV and FMV in gross value.

IMPORTANT DEFINITIONS

Fair Market Value (FMV): the value of an asset sold to a single buyer under no compulsion.

Forced Liquidation Value (FLV): the value of an asset sold at a properly advertised and conducted auction in which the seller is under compulsion to sell on an as-is, where-is basis as of a specific date.

Market Activity: A measure of the total number of observations collected by EquipmentWatch, including publicly-available dealer listings, auction results, and final sales data.

Meter Reads: A measure of Usage that varies by equipment market. For most equipment types, this represents engine hours at the time of observation.

Age: the age of an asset, based on model year and the year of observation.

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ABOUT EQUIPMENTWATCH

EquipmentWatch is the trusted source for heavy equipment data and intelligence. EquipmentWatch produces the leading database information products for the construction equipment industry and is the world leader in heavy construction research and serves more than 15,000 professional, high-volume users of construction and lift-truck data. Our online and print products are valuable tools in decisions surrounding the purchase, valuation, operation, and disposal of equipment.

For nearly 50 years, EquipmentWatch has served contractors, equipment manufacturers, dealers, rental companies, lenders and insurers, and government agencies involved in heavy civil construction.

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